

3<sup>rd</sup> World Congress on

# POLYCYSTIC OVARIAN SYNDROME

November 15-17, 2017 | San Antonio, USA

## N-acetylcysteine: A multi-dimensional approach for the treatment of PCOS

**Michelle Cooke**

Reproductive Wellness, Australia

Polycystic ovarian syndrome (PCOS) has been previously considered to be primarily a gynecological health issue with a reproductive endocrinology presentation of imbalanced sex hormones. However, further research has highlighted the multifaceted nature of PCOS involving several endocrine releasing glands beyond the realm of the hypothalamic-pituitary-ovarian axis. The endocrine releasing glands potentially involved as part of this multi-glandular syndrome are the thyroid, hypothalamus, pituitary, adrenals (hypothalamic-pituitary-adrenal axis) and the pancreas. Apart from these glands, the liver is often impacted in those with PCOS. Abnormal lipoprotein profile can be found, typically including low high-density lipoproteins (HDL), elevated low-density lipoproteins (LDL), elevated triglycerides, elevated total cholesterol and low apoprotein A-12. The prevalence of non-alcoholic fatty liver disease (NAFLD) is considerable in conditions correlated with insulin resistance (IR) which is a common feature of PCOS. It is speculated that NAFLD is a hepatic indicator of metabolic syndrome. Metabolic syndrome and IR are both an increasingly common finding in a PCOS presentation. Considering the multi-dimensional nature of PCOS; a treatment protocol needs to address all factors to successfully treat and manage this complex syndrome. N-acetylcysteine (NAC) is just one of many nutritional medicines that is considered an effective adjunctive therapy for the treatment of PCOS. NAC is a sulfur containing derivative from the amino acid L-cysteine and is a precursor to glutathione. This lecture will uncover the diverse actions of NAC, beyond that of purely correcting sex hormone imbalance in women suffering with PCOS.

### Biography

Michelle Cooke is an experienced Naturopath specializing in fertility, preconception, pregnancy, ART support, post-natal health and reproductive endocrinology. She offers a holistic treatment approach encompassing various complementary and alternative medicine (CAM): nutritional medicine, western herbal medicine and homoeopathy in conjunction with dietary and lifestyle advice. She has 17 years' experience within the health industry. She has completed her Bachelor of Health Science (Complementary Medicine) at Charles Sturt University in 2010 and the Advanced Diploma of Naturopathy at Nature Care College in 2006. She is the Founder and the Director of Reproductive Wellness, a naturopathic practice specialising in reproductive endocrinology located in Melbourne, Australia.

michelle@reproductivewellness.com.au

### Notes: